THE RESPONDER
TEXAS GENERAL LAND OFFICE • JERRY PATTERSON, COMMISSIONER
OIL SPILL PREVENTION AND RESPONSE PROGRAM • JUNE 2012

Mechanical Problems to Blame for Highland Bayou Spill

At approximately 9:50 a.m. on March 22, the La Porte field office of The Texas General Land Office Oil Spill Prevention and Response Program received a report from the National Response Center regarding a crude oil spill from the Dune Energy facility in Hitchcock. The initial report of a 5-barrel crude oil spill turned into a greater than 130-barrel spill.

Senior Response Officer Trang Vu was the lead investigator for the Land Office. Other agencies involved were the U.S. Coast Guard, the EPA, the Texas Parks and Wildlife Department and Galveston County. Dune Energy—designated as the responsible party—hired Garner Environmental Services, Inc. and OMI Environmental Solutions as cleanup contractors. Dune Energy also brought in J. Conner Consulting and O'Brien's Response Management as spill management companies. The spill was caused by mechanical problems with the Dresser Sleeve on the 750-barrel gun barrel tank.

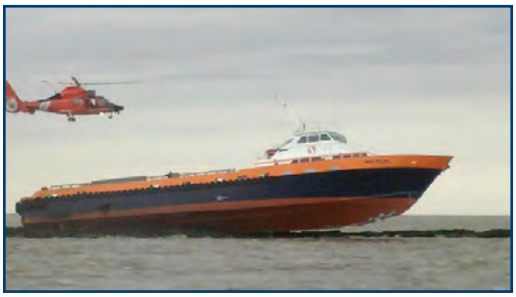
Boom deployed across Highland Bayou.

Skimming operations.

Due to the weak currents in this section of Highland Bayou, the spill only impacted about 1.5 miles of shoreline. The weak current in the bayou and the light crude oil allowed for a near perfect scenario for containment and skimming operations, which lasted about a week. However, the majority of the free floating oil in the bayou was recovered by the end of the third day. The amount of oil recovered by vacuum trucks and skimmers was approximately 130 barrels. The amount of oil recovered by absorbent materials is still pending.

Vessel Hits Sabine Pass West Jetty Wall

On February 24 at approximately 6:15 a.m., the 122-foot OSV *Miss Pearl* hit the Sabine Pass West Jetty wall. Four crew members aboard at the time of the accident suffered minor bumps and bruises. The crew members stayed aboard the vessel for several hours after the incident due to the vessel being stuck on the jetty wall and strong northerly winds causing a high sea state. The crew was eventually safely removed via a U.S. Coast Guard helicopter.



A USCG Helicopter flies over the damaged vessel.

As a result of the *Miss Pearl* hitting the jetty wall, one fuel tank was ruptured spilling diesel into Texas coastal waters. Strong NW winds at 25-30 mph carried the diesel offshore where it rapidly dissipated. It was later determined that 2,082 gallons of diesel were released.

The Responsible Party identified and hired a salvor to develop a salvage plan, which included removing the remaining fuel and lifting the vessel from the jetty and placing it on a deck barge for transit to Louisiana for hull repairs. This vessel removal was accomplished one week later.

A crane lifts the crew boat off of the jetty.

Land Office and Texas State Guard Create a Partnership for the Future

The Texas General Land Office Oil Spill Prevention and Response Program recently conducted a three-day training exercise with the Texas State Guard Maritime Regiment located at Camp Swift in Bastrop. The Texas State Guard is an all-volunteer branch of the Texas Military Forces. The Maritime Regiment, one of four major sub-commands within the TSG, provides highly trained personnel for operations in maritime environments in support of homeland defense and in response to man-made or natural disasters. Responders from all five Land Office regions conducted training that included classroom presentations, boat operations and spill response exercises at Lake Bastrop Park.

The first day at Camp Swift consisted of a presentation that began with an overview of the Land Office program and what it does to protect the fragile coastal environment, while supporting vital petrochemical industries. The presentation continued into real-life disaster events that have affected coastal areas of the United States and Texas, with an insightful perspective on dealing with large, catastrophic events.

The second day of training was held at Lake Bastrop North Shore Park and focused on boating operations using a variety of boats provided by the Land Office. Each training participant was given the opportunity to launch and recover the boats, as well as operate them on the lake. Participants were instructed in safe handling procedures, high and low speed operations, deep and shallow water operations, and operations in day and night environments.

TSG loading a boat on the trailer.

Boom being deployed by TSG during a spill exercise.

The final day of training was a continuation of boating operations, along with on-site scenario discussions and boom deployment exercises. The training ensures that if TSG personnel were ever deployed in support of a Land Office mission, they could safely and effectively operate Land Office vessels in a variety of conditions. The Texas State Guard Dive Team also participated in the training, conducting a simulated search for a missing boater that was described as realistically as possible. Ensign Hooton, 2nd Battalion Foxtrot Company Dive Team Leader, said the unit's readiness has been enhanced with "drills throughout the year involving different search patterns." Hooton was pleased with the opportunity to train with the Land Office, and said the Texas State Guard is "dedicated to serving Texas" and is "always looking for experienced and non-experienced personnel." The three-day exercise concluded with all personnel back on land, safe and sound, and equipment loaded. The Land Office and Texas State Guard Maritime Regiment agreed that the joint training was an outstanding opportunity for the two organizations to work together and better understand how each could potentially support the other's mission. "This is a great partnership for the future," said Brig. Gen. Robert J. Bodisch CDR, Texas State Guard Maritime Regiment. Bodisch complimented the Land Office, noting that the Guard was "excited for this opportunity" and the training was "extremely professional."

GLO Donates Fire Boom

Recently, the Texas General Land Office Oil Spill Prevention and Response Program staff of the South Texas Coastal Zone transferred ownership of specialized oil spill response equipment to the Refinery Terminal Fire Company (RTFC) of Corpus Christi. The response equipment—500 feet of Oil Stop Fire Boom—is on a reel mounted to a flat bed trailer. Fire boom is similar in structure to ordinary air inflatable boom, but is larger and made of fire resistant material. Fire boom can be used to herd oil on the water's surface in order to confine it within a smaller area and increase its thickness, which is necessary for a complete in-situ burn of an offshore oil spill. This is a recognized alternative technology to mechanical recovery of spilled oil. In-situ burn guidelines state the oil must be 2mm to 3mm thick in order to ignite. Fire boom could also be placed at an outfall where burning oil is expected to enter coastal waters as a preventative measure to reduce further impacts. The donated fire boom and its associated hardware are ready to be used immediately, and will continue to be maintained and ready for deployment in the event of a spill.

Donating the fire boom to the RTFC was an easy decision for Regional Director Jimmy Martinez of the Land Office. Established in 1948, the RTFC is the largest non-profit industrial firefighting group in the nation. The RTFC protects the facilities owned by the corporations that make up its cooperative membership.

The Land Office is confident that the pre-staged fire boom is one more tool the RTFC can use to protect the interests of the public, industry, and both state and federal agencies.

Texas General Land Office SRO II Fred Valadez hands over the title to the trailer which carries 500 feet of fire boom to Deputy Fire Chief Paul P. Swetish.

Natural Disaster Planning and Training Benefits Oil and Hazardous Materials Response Capability

Land Office participating in NDOW Training in Texas City.

Following Hurricane Ike (September 13, 2008), a hot wash identified several areas that needed improvement and better coordination relative to Emergency Support Function (ESF) 3 (Public Works and Engineering) and ESF-10 (Oil and Hazardous Materials Response). A work group of operational personnel was formed from two state agencies and two federal agencies. They included the Texas Commission on Environmental Quality (TCEQ), Texas General Land Office (GLO), U.S. Environmental Protection Agency (EPA) Region 6 and the U.S. Coast Guard (USCG) District Eight Strike Team and District Response Advisory Team (DRAT). The group held its first meeting on April 27, 2009, in Austin and came to be called the Natural Disaster Operational Workgroup, or NDOW.

Over the next two years, the NDOW worked to address the needs identified in the hot wash and recommended the following:

1. One centralized data management system with agreed upon Data Quality Objectives. Response Manager is the new centralized data management system to be utilized. Data Quality Objectives have been created by all agencies to utilize during a natural disaster event to fit all operational and reporting requirements. Standardized field data sheets have been created to utilize in the field during the assessment, response and closure process.

2. Standard Operating Procedures (SOP) and forms (Field Evaluation and Recovery Procedures), and an ICS form (214B) have been provided to all agencies and are available in hardcopy and in electronic format for laptops or PDAs.

3. Co-location and coordination of agencies pre-landfall at preselected locations.

4. Formalized data management training and software delivery for field personnel.

5. Pre-identified staging areas and waste collection pad sites.

Currently, seven SOPs have been finalized by the workgroup, and include Rapid Needs Assessment, Orphan Container Evaluation and Recovery, Oil Spill Assessment and Removal, and Drinking Water and Waste Water Evaluation. Four field data sheets have been finalized for field use. Since May 2010, four multi-day training sessions have been held in Corpus Christi, Houston, Port Arthur and Harlingen/Brownsville. Personnel from the TCEQ, the Land Office and the USCG have been trained in the EPA's Response Manager software, the SOPs and field data sheets.

Most importantly, the Eighth District United States Coast Guard directed that all USCG Sectors in Texas adopt and utilize this protocol for all future federally declared disasters. Thanks to Capt. Ed Cubanski III, Chief, Incident Management Branch, and Lt. Dan Denham (DRAT) for their continuing efforts and hard work. EPA Region 6 Federal On-Scene Coordinator Nicolas Brescia led this effort from the beginning with support from START contractor Weston Solutions, Inc. The EPA also contributed the use of its "Response Manager" software which is the foundation of the data collection and management system.

Thanks are also due to the TCEQ and Jeff Lewellin (formerly with the TCEQ, but now with Weston Solutions) and his equally capable replacement on the NDOW, Jeff Kunze. Bill Grimes and Bobby Rivera represented the Land Office's Oil Spill Prevention and Response Program through this process. The NDOW group also identified the difficult issues facing the ESF-10 funding request for the Oil Spill response operations and possibly putting in place pre-scripted Mission Assignments for Pre-Deployment and Recovery operations.

The improved operational efficiency and data management of this project cannot be over stated. While this endeavor is relatively new, various aspects of it have been used in field-scale responses over the last 18 months—including Deepwater Horizon and Hurricane Irene—and emergency responders in other regions are realizing its usefulness. Greg Pollock, Deputy Commissioner of the Oil Spill Prevention and Response Program, praised this effort during his remarks at the November 2011 Clean Gulf Conference in San Antonio. "I would like to personally commend everyone involved with this effort and offer this up as an excellent example of good government," Pollock said.

The NDOW has conducted regional training along the Texas coast for the last two years, prior to the start of hurricane season. In addition to the refresher training conducted in May, the group will be conducting the first multi-day deployment drill which is scheduled for July 17-19, 2012 in Corpus Christi. The drill will be a multi-agency Hurricane Field Exercise utilizing NDOW products. State and federal agencies participating in the event will be the EPA, USCG, Land Office, TCEQ and the Texas Parks and Wildlife Department. An Incident Management Team will be formed with three operational branches utilizing NDOW products and pre-designated staging areas.

All of the documents referred to in this article have been added to our new 2012 Texas Coastal Oil Spill Planning and Response Toolkit. For more information about this project, please go to http://epaResponseManager.net/NDOW.

Land Office Meets with Local College Students

Recently, Region 2 staffers Craig Kartye and Angela Jarvis spoke to student members of the University of Houston's Society of Industrial Hygiene and Safety Professionals (SIHSP). The presentation focused on the Texas General Land Office Oil Spill Prevention and Response Program and included discussion on where oil spills come from, how they can be prevented, what effects spills have on a bay's ecosystem, and how they're cleaned up. One attendee described the presentation as "… energetic, informative, intriguing and practical." After the presentation, members of SIHSP were given an opportunity to ask questions and visit with the Land Office representatives. Organizations interested in having the Land Office speak at their functions are encouraged to contact their local Land Office regional office. Contact information can be found on the last page of *The Responder*.

Land Office Provides Training

Personnel reviewing maps during the mock incident.

Over the years the Texas General Land Office has sought partnership programs with agencies that work closely during response and prevention programs. In April, the Aransas County and Port Lavaca Navigation Districts contacted Dale Smith of the Land Office Oil Spill Prevention and Response Program to coordinate a refresher HAZWOPER course for their personnel. Response personnel are required by OSHA to be HAZWOPER certified annually.

The navigation districts perform a vital role in spill prevention by operating the Oil Reclamation Systems in their areas. These units provide surrounding communities with a safe and secure location to dispose of oily waste at no cost while significantly reducing illegal discharges into coastal waters. Joseph Hilliard, in the Brownsville Region, an OSHA authorized instructor and a Master Train-The-Trainer, set up the curriculum for the refreshers and provided on-site training. During the training, 27 personnel went through a full-scale exercise.

The teams worked through a mock incident and were able to experience leadership roles for the first time. Hilliard emphasized safety to the responders and provided a better understanding of various types of response equipment used during incidents. Personnel also took part in a field exercise that encouraged discussion of response strategies.

Feedback and comments on the course were positive, praising it as the most specific HAZWOPER training the participants had taken, and tailored to their operations. A few of the other partnership programs include the U.S. Fish and Wildlife Service, the EPA, the National Weather Service and local colleges.The Land Office is committed to providing training to our partners and also relies on their assistance during spill responses.

Personnel presenting their strategies.

Eagle Ford Shale Development Brings Influx of Business

As the Eagle Ford Shale formation continues to create an oil and natural gas boom across South Texas, the commerce associated with “mid stream” industry and technology is also booming. Shipping, trucking, pipelines and transfer facilities have all shown drastic growth and development as new drilling sites come into production each day south of the Alamo City. This is great news for the 24 counties the formation runs through, as it creates tremendous employment and investment opportunities all across South Texas.

One of the many challenges associated with the newly found oil formation is the need to deliver product to the market in a safe, economical and commercially viable manner. This has resulted in the South Texas Coastal Zone experiencing a massive influx of barge and truck traffic to accommodate market needs. From August 2011 to September 2011, Region 5 of the Texas General Land Office Oil Spill Prevention and Response Program—based in Port Lavaca—tracked a 625 percent increase in barrels (bbl) of oil transferred across the dock, going from four barges carrying a total of 100,000 bbl to an estimated 25 barges carrying a total of 625,000 bbl in only one month. It has not stopped there; from August 2011 to March 2012, Region 5 has tracked a 1,800 percent increase in barrels of oil being transferred across local docks. This means that in a mere seven months, Region 5 has seen transfers jump from 100,000 bbl a month to a colossal 1.85 million bbl being transported by 75 barges a month. This increase in transfer volume has a direct correlation with the number of tanker trucks on the road and new facilities on the waterfront. Each barge load requires an estimated 45 tanker trucks, an influx of truck traffic playing a pivotal role in the South Texas economy. Before September, Region 5 had only two major oil transfer facilities responsible for 100,000 barrels a month. Since September, the number of facilities has increased to six and more are expected to move into the area in the months ahead. It is likely that this trend will continue into the future with no slowing of growth in sight.

Obviously, with this increase in volume comes the increased threat of accidents and spills. Many of the areas through which the barges travel are considered sensitive habitats by the state of Texas. In an attempt to work hand-in-hand with industry, the Land Office has gone to great lengths to ensure that contingency plans are in place to minimize the impact of potential oil spills in sensitive areas. In November, the Land Office held a meeting at the Formosa Guest House to bring together local industries and spill responders to address response capability in the area. Speakers included representatives of the Port of Victoria, the Port of Calhoun County, the U.S. Coast Guard, and many more. Topics of the meeting included the increase in oil transfers, the growth of local ports, and the need for more spill response capabilities in private industry. The meeting was a success as two new companies were added to the list of state-certified Discharge Cleanup Organizations (DCOs). Region 5 now has five DCOs, including Palacios Marine Industrial, Anderson Pollution Control and Clean Tank. Along with these new companies comes an increase in personnel trained specifically in spill prevention and response, ensuring that the Texas coast will continue to remain protected and response ready for many years to come.

Abandoned Vessels Snatched from Waterways

The "Snatcher" at work, pulling an abandoned vessel out.

Recently in the Region 1 area of the Texas General Land Office Oil Spill Prevention and Response Program, numerous abandoned small recreational vessels have appeared in the bayous and waterways of southeast Texas. These vessels normally have been stripped of all working gears and motors, leaving a fiberglass hull, which has no intrinsic value to anyone.

In response to this, the Region 1 office has retrofitted a low-boy trailer with a surplus 8,000-lb. winch from the office's warehouse. Regional Director J.T. Ewing thought it could be added to the trailer along with a donated jib crane.

Response Officers Johnny Porter and Tyler Griffin used their extensive welding experience to weld the winch and crane, as well as a roller for the rear of the trailer. The office had already extracted about 10 of these abandoned boats before the decision was made to build something to make it easier and safer to remove them from the water without outside assistance. And thanks to the new hardware, abandoned vessels are removed at little or no cost to taxpayers.

Since the writing of this article, Region 1 has used the trailer to remove two abandoned vessels found in local waterways.

The "Snatcher" has an 8,000-lb. winch.

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24 hours

The Responder is published by the Texas General Land Office.
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or by phone at 281-470-6597.

Kim Griffith Honored With Distinguished Service Award

The Texas General Land Office Oil Spill Prevention and Response Program recently recognized Kim Griffith, Compliance Coordinator with the Region 5 Port Lavaca office, with a Distinguished Service Award. Griffith was recognized for exceeding regional expectations by accepting additional responsibilities as necessary. Her responsibilities included ensuring that adequate response capability grew with the influx of new companies to the Region 5 area. She also reviewed existing state regulations and compliance procedures and set up meetings to discuss issues with the U.S. Coast Guard, representatives of the Region 5 facilities, as well as county, city and state agencies.

Griffith has continued training as a back-up on spill case processing, and has also been increasing her knowledge of several databases that are instrumental in the generation and submission of quarterly reports and processing of fees accessed. She has become an integral part of the development team for a new database system for the Oil Spill Prevention and Response Program.

Additionally, this past summer, Griffith assisted with updates to the GLO Atlas/Toolkit. She will continue to be a part of the entire yearly development process that will include creating and maintaining the production schedule; creating, updating and proofing links; batch processing and all the steps necessary to produce a professional and functional toolkit.

Griffith's continued contributions and accomplishments have been a valuable part of the Oil Spill Prevention and Response Program.